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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,040	12/04/2003	Sergei Alekseenko	25455-X	4862
20529	7590	03/21/2006	EXAMINER	
NATH & ASSOCIATES 112 South West Street Alexandria, VA 22314			KASZTEJNA, MATTHEW JOHN	
			ART UNIT	PAPER NUMBER
			3739	
DATE MAILED: 03/21/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/727,040

Applicant(s)

ALEKSEENKO ET AL.

Examiner

Matthew J. Kasztejna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/20/04, 11/22/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 49 is objected to because of the following informalities: typo in line 2 with regard to the period after the word particular. Appropriate correction is required.

Claim 50 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim refers to a slender tube for use with an optical system as defined in claim 26. However, claim 26 already refers to a slender tube.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 26-27 and 31-46 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 7,018,330 to Alekseenko et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are either broader or identical to the claims in U.S. Patent No. 7,018,330. Claim 1 of the instant application recites an imaging system which forms an image plane located "distally to the optical media", whereas U.S. Patent No. 7,018,330 recited an image plane located on an axis "within said tube at the distal end thereof". Furthermore, Claims 31-35 and 37-46 of the instant application are identical to claims 3-7 and 9-18 of U.S. Patent No. 7,018,330, respectively.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 26-35, 37-40 and 50-51 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,891,015 to Strahle.

**In regards to claims 26-32 and 50-51**, Strahle discloses an optical device having an imaging system disposed of at the distal end having a wide viewing angle, consisting of a planar-concave aspherical distal lens 25, two glass rods 27 and 3 and an inner aspherical lens 28. Strahle further discloses a viewing system having a narrow viewing system designed to enable viewing of an object, consisting of an ocular 21

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having a filed lens 31, a direct-vision prism 33 for image reversal, a composite lens 34 and a single lens 35 (see Fig. 2a). The intermediate image plane 32 can be located closer to the distal end (see Col. 2, Lines 40-44). In the broadest interpretation of the claim, Strahle discloses a telescopic system that is spaced from the image plane by a majority of the length. Furthermore, the endoscope can be used over the entire range of working distances (see Col. 2, Lines 45-53).

**In regards to claim 33**, Strahle discloses the imaging errors in the field, such as image-field convexity, astigmatism and chromatic magnification error are compensated by the front group coating with a field optic. Overall, an optimally corrected image then results (see Col. 3, Lines 5-10).

**In regards to claim 34**, Strahle discloses that imaging powers can be achieved by replacing the aspherical lens with two spherical lenses (see Col. 3, Lines 39-41).

**In regards to claim 35**, Strahle discloses an imaging system having an imaging element 25 with a wide viewing angle (see Fig. 2d). Strahle further discloses the chromatic magnification error present in the image plane is corrected by the ocular 21, which includes a plano-convex lens (see Fig 2a).

**In regards to claim 37**, Strahle discloses an optical device wherein the optic mounted in the endoscope tube is simple and has a cost-effective configuration and therefore is suitable for a disposable endoscope (see Col. 2, Lines 24-27).

**In regards to claim 38**, Strahle discloses an optical device wherein the lenses and glass rods can also be made utilizing plastic lenses (see. Col. 8, Lines 43-45).

**In regards to claim 39**, Strahle discloses an optical device which includes a viewing component and an endoscope tube. The viewing component 1 and the endoscope tube 2 can be separated from each other at the interface 3. The endoscope tube 2 is configured as a disposable component which is used only once and is then discarded; whereas, the viewing component 1 is provided to be used many times.

**In regards to claim 40**, Strahle discloses the optical device as an endoscope.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 36 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,891,015 to Strahle.

**In regards to claim 36**, Strahle discloses an optical device comprising a tube having a diameter  $d$ , wherein the device comprises a viewing portion housing 1 having a dimension perpendicular to the optical axis, which exceeds the diameter  $d$  and partially accommodated within the housing but is silent with respect to the tubes length spanning about 10-100 time the diameter  $d$ . However, Strahle teaches of an image plane being located a distance of 20-600 mm from the distal end of the tube which is undoubtedly 10-100 times the length of the diameter of the tube itself.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,891,015 to Strahle in view of U.S. Patent No. 5,841,578 to Hoogland.

**In regards to claim 41**, Strahle discloses an optical device having an imaging system disposed of at the distal end of the system having a wide viewing angle, and viewing system having a narrow viewing system disposed at the proximal end of the system but is silent with respect to using the optical device as a borescope. Hoogland discloses an analogous optical system which can be used in endoscopes, borescopes, dental scopes and the like. It would have been obvious to one skilled in the art at the time the invention was made to use the optical device of Strahle as a borescope in order to broaden the scope of the invention since many devices can use identical optical systems, as taught by Hoogland.

Claims 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,891,015 to Strahle in view of U.S. Patent No. 5,423,312 to Siegmund et al.

**In regards to claims 42-46**, Strahle discloses an endoscope having an imaging system disposed of at the distal end of the system having a wide viewing angle, and viewing system having a narrow viewing system disposed at the proximal end of the system but is silent with respect to further including an illumination light guide designed to coaxially and contiguously adjoin the tube, and which can be composed of fiber optic strands or wherein the light guide is an annular cylinder. Siegmund et al. teach of an analogous optical device wherein a light-conducting sleeve 67 provides a cavity for transfer of illumination energy to the object. A typical illumination input point is shown at 78. Use of a plastic light-conducting sleeve is compatible with the concept of ultrasonically or chemically welding plastic distal optics 68 into the distal tip. The shaft

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depicted in FIG. 8 is completed by inserting the HRI tunnel rod 1 via the opening at the proximal end 69. Flexible tabs 70 at the proximal end of the light-conducting sleeve could be used to retain the HRI tunnel rod. Examples of distal end configurations 71 and 72, providing different illumination fields, are also shown in FIGS. 8b and 8c. It would have been obvious to one skilled in the art at the time the invention was made to use the light-conducting sleeve in the device of Strahle in order to provide illumination at the desired observation site, as taught by Siegmund et al.

Claims 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,891,015 to Strahle in view of U.S. Patent No. 6,730,019 to Irion.

**In regards to claims 47-49**, Strahle discloses an endoscope having an imaging system disposed of at the distal end of the system having a wide viewing angle, and viewing system having a narrow viewing system disposed at the proximal end of the system but is silent with respect to one or more LEDs connected to a power source and placed at the distal end of the endoscope. Irion teaches of an endoscope comprising a shaft comprises an imaging system arranged in the shaft and an illuminating system which allows light emitted by a light source to emerge at the distal end of shaft, wherein the light source comprises at least one light emitting diode. The light source comprises at least two light emitting diodes which emit light in different spectral ranges, and the light of the at least two light emitting diodes emerges spectrally additively mixed from the illuminating system. It would have been obvious to one skilled in the art at the time the invention was made to place LEDs at the distal end of the device of Strahle in order to provide illumination at the desired observation site, as taught by Irion.



**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Kasztejna whose telephone number is 703-305-0396. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

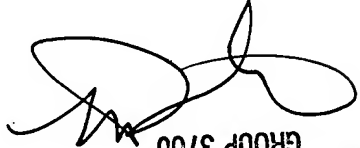
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on 703-308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK

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